

Memorandum

City of Lawrence

Public Works

TO: Chuck Soules
FROM: Mark Thiel
CC: Tom Orzulak, Steve Lashley
Date: 8/20/10
RE: **Phase 2 Mill and Overlay Project PW-1006**
Curb repair / replacement Issue Randall Rd., 10th Ter., and 10th Pl.

Back ground

Recently a question arose from a resident, Mr. Stan Trekell (1017 Randall Rd.), as to the level of curb removal the city was undertaking on Randall Rd., 10th Ter., and 10th Pl. His concern was that we were not removing and replacing 100% of the curbs similar to what other streets in the area are receiving (Arizona Ct., 9th Ct., Yale Rd., and College Ave.). Mr. Trekell originally contacted the City of Lawrence in March of 2009 asking us to evaluate Randall Rd., 10th Ter. and 10th Pl. for consideration in a future mill and overlay. Staff visited the area and added it to the list of potential locations for the 2010 program. It was not originally selected by the database as a potential area for 2010 but made the list after a site inspection and as a concerned area of the residents. In July of 2010, as the mill and overlay project was getting underway; Mr. Trekell again contacted the city with concerns about the level of curb that was marked for removal. Steve Lashley and I meet with Mr. Trekell on site and walked the entire 2,800 linear feet of curb marking additional curb for removal (approximately 18%) leaving the structurally sound areas unmarked. In August Mr. Trekell again contacted the City of Lawrence to inquire as to why their area was not receiving complete curb replacement when others around them were. City Manger David Corliss, Public Works Director Chuck Soules and I met with Mr. Trekell and some neighbors to address the issue and explain how we came to our decision.

The decision and choices that we make related to our pavement management program go back to the original planning meeting we hold each year to determine the sections of roadway that will receive maintenance and to what level. In preparing for the 2010 maintenance program we started by utilizing the pavement management database. We queried the database which calculated an amount of work based on an approved budget verses need. Streets are added or deleted based on several other criteria, one being citizen input. (See map 1, October 2009 planning map. Pg. 4)

The 2010 pavement management budget in the amount of \$4,900,000 was approved in August of 2009. Based on that amount the database quarry was narrowed to fit within the allocated dollars. Meetings were held to receive input from the pavement engineer, public work director, city manager, street division manager, utility companies, as well as from citizens. All of this data along with known problem areas were then reviewed and a final plan was submitted to the City Commission for approval.

This was the case for Randall Rd., 10th Ter. and 10th Pl. Mr. Trekell had contacted the city inquiring about the next scheduled maintenance for these streets. It was decided to add these

streets to the 2010 program after consideration of Mr. Trekell's concern, combined with PCI ratings, site visit inspection, and review of areas already part of the 2010 program. This results in some sections being eliminated from the plan in order to add other areas. In this case several sections of streets as recommended by the database were not included in the 2010 plan (see attached table 1. pg. 5). The 2010 program was approved by the City Commission in November of 2009 (see map. Pg. 6).

Upon approval we begin to design our projects around the approved plan and budget. Each year we perform crack sealing, microsurfacing, concrete rehabilitation, a KLINK project and two phases of mill and overlay.

Phase 1 Mill and Overlay is generally only a mill and overlay; only small sections of curb, if any, are repaired with this project. The sections of pavement in this phase do not need full curb replacements. Under normal project selection the streets in question (Randall Rd., 10th Ter., and 10th Pl.) would have been included in phase 1 due to the limited amount of curb needing to be replaced. To better illustrate this I have attached a map (see map. pg. 7) that shows streets that were overlayed between 2008 and 2010 that did not receive much, if any, curb replacement as part of the project. Also inserted for comparison are photos of the curbs showing their condition in various locations as well as curbs from Randall Rd., 10th Ter. and 10th Pl. (see photos. Pg 8 to 15).

The Concrete Street Rehabilitation Project is another project that receives only necessary curb replacement. Typically concrete streets will receive full depth patching and partial curb replacement as illustrated in the attached photos of Inverness Drive concrete street rehabilitation from 15th to 23rd St. (see photos. Pg. 16).

Of the 2,800 linear feet of curb and gutter on Randall Rd., 10th Ter., and 10th Pl. only 504 linear feet actually needs to be replaced, or approximately 18%. This represents a minimum removal and replacement of 3 foot sections of curb. Randall Rd., 10th Ter., and 10th Pl. were included with Phase 2 Mill and Overlay because of their proximity to other sections that were part of Phase 2, i.e. Yale Rd., College Ave., 9th Ct. and Arizona Ct. These sections of roadway had a minimum of at least half or 50% of the curbs in deteriorated condition requiring complete removal and replacement. (See summary of pavement sections and maintenance history. Pg. 17)

One goal of the program is to be as efficient and effective with the limited resources available. That requires tough decisions to be made. But in all cases we apply sound engineering rules to our decisions. It typically is not part of our program to replace curbs that are structurally sound and in good condition.

Adding the entire section of curb and gutter along Randall Rd., 10th Ter. and 10th Pl. would require the addition of 2,296 linear feet of curb and gutter at a cost of \$66,476 plus incidentals such as roof drains, sprinklers, and sump pump drains. In order for this additional curb work to be added and not raise the cost of the project another scheduled location would have to be reduced or eliminated.

Currently 15th St. (Connecticut to Haskell) and 13th St. (Connecticut to Haskell) are the only remaining streets scheduled as part of Phase 2 Mill and Overlay that have not been either started or completed. In order to replace the curbs requested the funds would have to be taken away from 15th or 13th St. or another funding source would have to be identified.

Recommendation

The majority of curbs on Randall Rd. 10th Ter. and 10th Pl., (80% plus) are structurally sound and do not need to be replaced. Staff recommends that these additional curbs not be replaced as requested by the residents, and direction be given to proceed as planned to mill, overlay and repair deteriorated curbs at previously approved locations.

Map 1

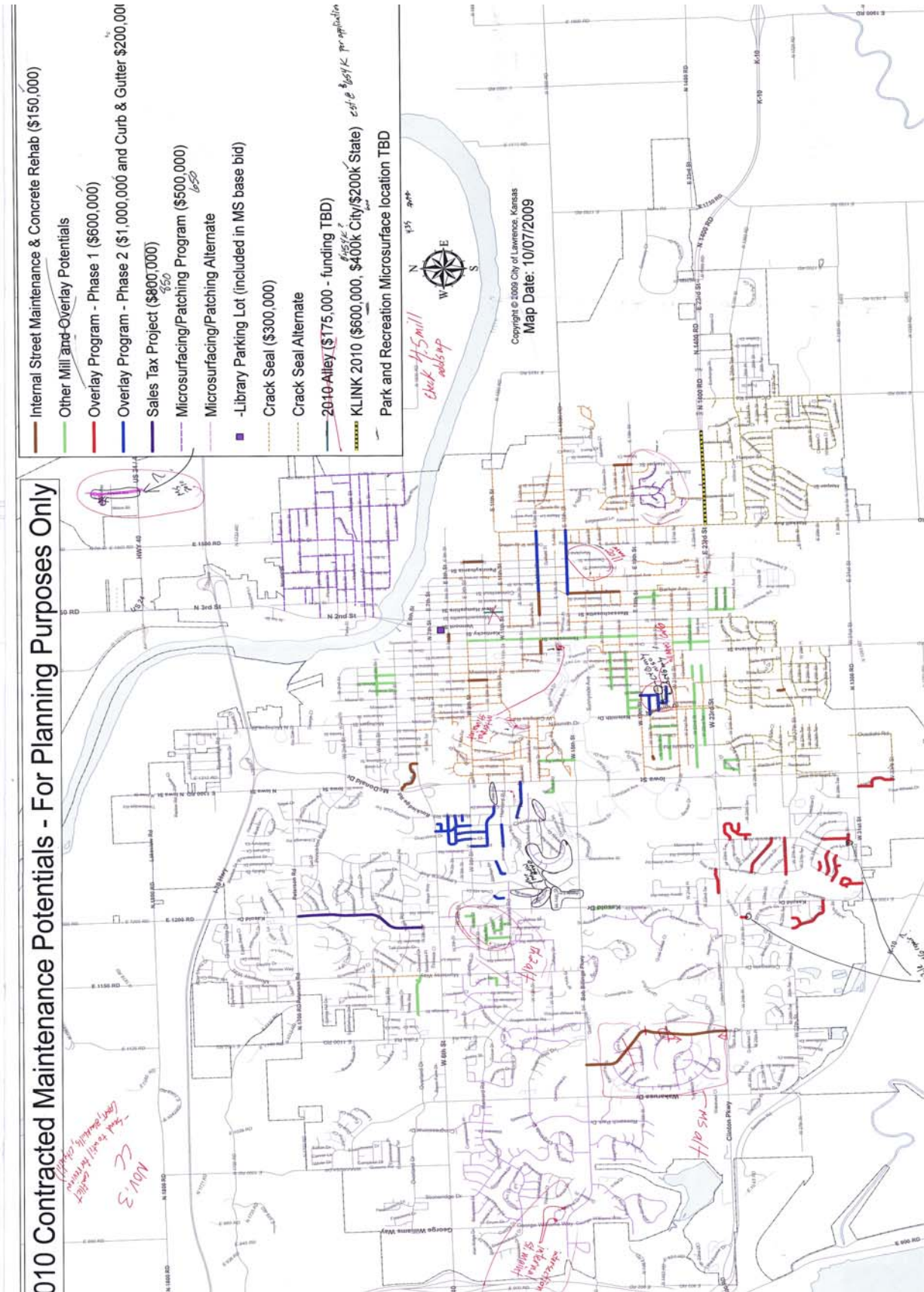
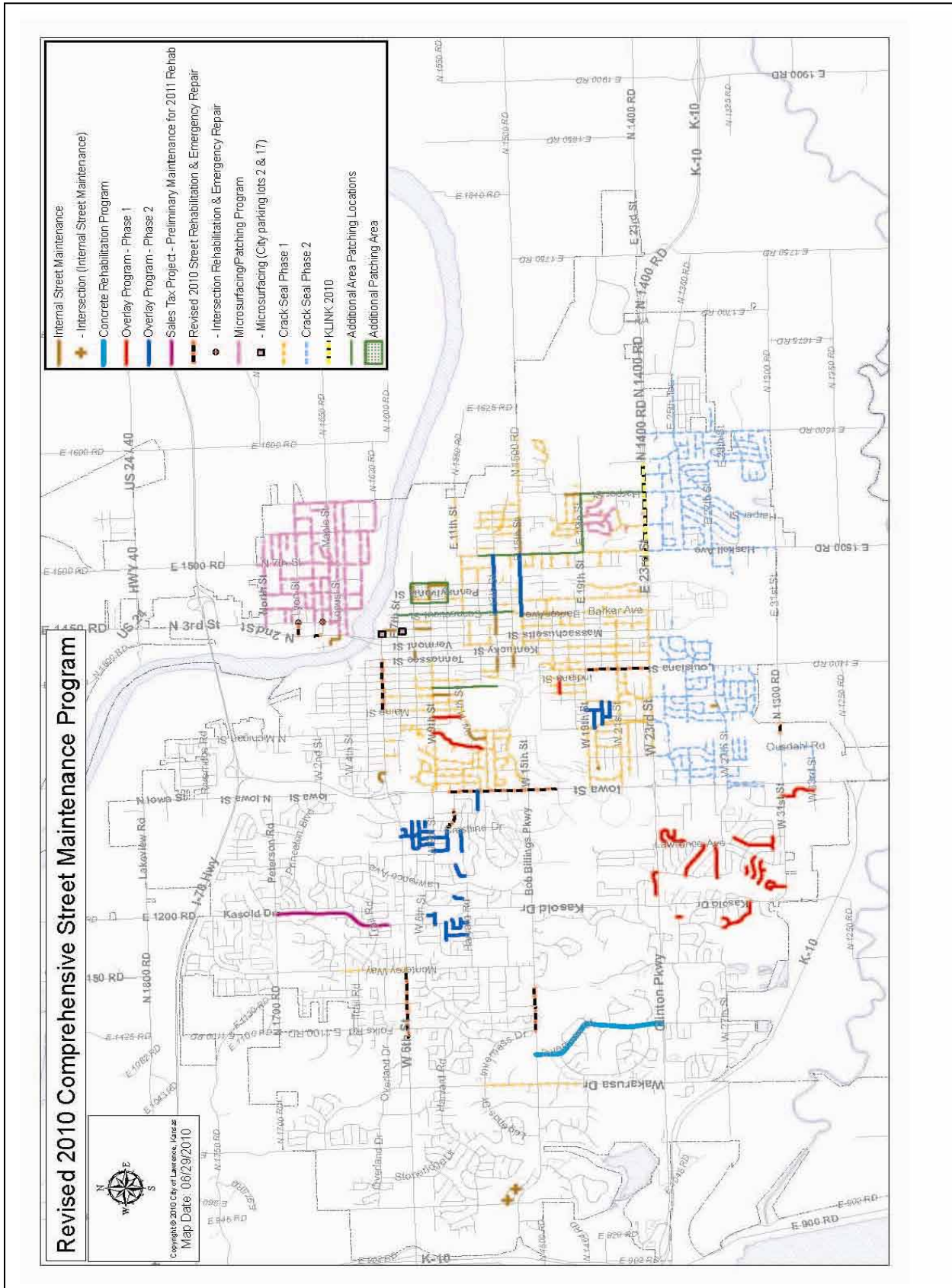


Table 1

STREET	SECTION	PCI
Winona Avenue	Massachusetts to Barker Avenue	40
Pawnee Avenue	Massachusetts to Barker Avenue	37
Massachusetts	23 rd to Indiana Avenue	41-40
Rhode Island	19 th to 20 th	46
E. 20 th	New Hampshire – Barker Avenue	43
Tennessee	9 th to 19 th	40-54 (Arterial)
Ohio	19 th to 21 st	38
W. 22 nd Street	Louisiana to Vermont	43
W. 4 th Street	Indiana to Maine	53
Mississippi	West 5 th to West 4 th	34
Illinois	West 5 th to West 3 rd	44
Alabama	West 5 th to West 4 th	41
West 18 th	Naismith to Louisiana	55
Maine Street	18 th to 19 th	47
Missouri	18 th to 19 th	41
Arkansas	18 th to 19 th	48
Hillview Road	W. 19 th to W. 21 st	56
W. 20 th Street	Clifton to end of cul-de-sac	40
W. 21 st Street	Clifton to end of cul-de-sac	44
W. 22 nd Street	Alabama to end	30
W. 22 nd Terrace	Ousdahl to Naismith	44
W. 22 nd	Illinois to end	40
W. 22 nd Terrace	Alabama to end	44
Murphy Drive	All	29-46
Engel Road	W. 15 th to University Drive	40
Terrace Road	All	46
Overland Drive	Monterey Way to Eldridge Street	55
Alma Drive	10 th Circle to 20 th Place	48

Street sections recommended by the database but not selected for the 2010 program

Map 2

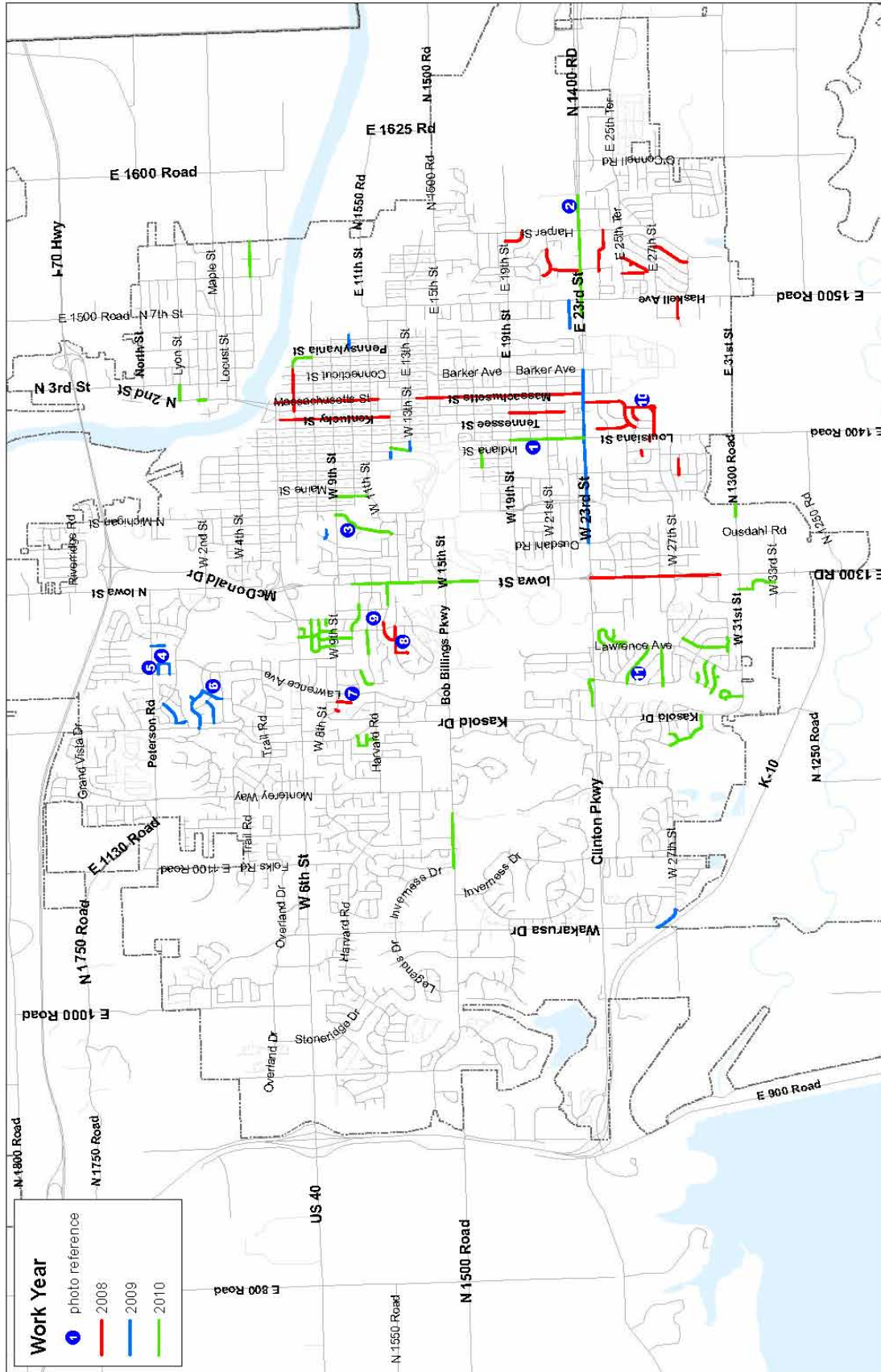


Map 3

Lawrence Mill & Overlay Streets 2008 - 2010

Date: 8/23/2010

DISCLAIMER: NOTICE: The map is provided "as is" without warranty or any representation or accuracy. The user is responsible for the accuracy, completeness, timeliness, and reliability of the information for the purposes for which it is used. The user is responsible for the accuracy, completeness, timeliness, and reliability of the information for the purposes for which it is used. The user is responsible for the accuracy, completeness, timeliness, and reliability of the information for the purposes for which it is used.





1 – 2010, Louisiana – 19th to 23rd



2 – 2010, E 23rd KLINK



3 – 2010, Emery Rd.



4 – 2009, Bowstring Dr.



5 – 2009, Moccasin Dr.



6 – 2009, Rockfence Pl.



7 – 2008, Caulk Hill Ct.



8 – 2008, Oxford Rd.



9 – 2008, Orchard Ln.



10- 2008, Montana St.



11 – 2010, Yellowstone Dr.

Randall Rd, 10th Ter. and 10th Pl



Phase 2 Mill and Overlay – 10th Terr.



Phase 2 Mill and Overlay – Randall Rd.



Phase 2 Mill and Overlay – 10th Pl.



Concrete Rehabilitation Project – Inverness



Concrete Rehabilitation Project - Inverness

Summary of Pavement Sections and Maintenance History

College Ave Over 50% of the curb was gone or deteriorated. The existing curb was 18" style and could not be matched with the 24" curb (current standard) and allow proper drainage. PCI 46.5*

Maintenance history – Built in 1987, Street is full depth asphalt no prior maintenance

Yale Rd Over 50% of the curb was gone or deteriorated. PCI 60*

Maintenance history - Built in 1969. Concrete with 2" asphalt overlay 1994

9th Ct Over 50% of the curb was gone or deteriorated. PCI 48.5*

Maintenance history - Built in 1965. Concrete with 2" asphalt overlay 1989

Arizona Ct Over 50% of the curb was gone or deteriorated. PCI 65.6*

Maintenance history - Built in 1972. Concrete with 2" asphalt overlay 1989

10th Pl Some curb in poor condition. PCI 48.1*

Maintenance history - Built in 1969. Concrete with 2" asphalt overlay 1978 and 1991

10th Terr. Some curb in poor condition. PCI 43.9*

Maintenance history - Built in 1969. Concrete with 2" asphalt overlay 1991

Randall Rd (10th Pl to 10th Terr) Some curb and gutter poor condition. PCI 66.4*

Maintenance history - Built in 1969. Concrete with 2" asphalt overlay 1991

Randall Rd (10th Terr to Harvard Rd) some curb in poor condition. PCI 42.4*

Maintenance history - Built in 1969. Full depth concrete no prior maintenance

* PCI's of street sections do not typically take into consideration the condition of the curb – The rating is mostly directly related to the street.